

Rice iGEM Meta-Analysis Questions

1. What university is your team associated with, location of university, project name, and project track?

Cairo University, Egypt, Africa. Project name: Sea- . Project track: Environmental.

2. How many PIs, advisors, and undergraduate team members does your team have?

We have 2 primary PIs and all of the 10 members are undergrads.

3. What were the primary reasons why you chose your project?

One day while categorizing the problems in Egypt, we were shocked by the news that the third largest lake and the second most famous one “Lake Qarun“ which was once a freshwater lake is turning into a huge salt basin that made it unsuitable for drinking. As a result of the increasing rate of population growth, more rigorous cultivation, irrigation and other human activities, as well as the high rate of evaporation, have led to a high concentration of salts. The lake is now approaching the salinity of seawater, with a ratio of around 34.5 parts per thousand, said to be growing at the rate of 0.4 parts per year.

4. What was the process you went through in choosing your project?

To choose our project, it took us a long time. We brainstormed several meetings, wrote the problems that Egypt was facing. We then started to excluded tracks that we were not interested in. Then, we excluded the ideas that we won't work on them, surfed the internet to know more about the current solutions to the idea we chose.

5. Do you think your location or local environment influenced your project selection? If so, how might these influences be described? (For example, after flooding in the Houston area, teams in that region gravitated toward flood-related projects)

Yes, it influenced our project selection. Although Egypt has the Nile River, which is the longest river in the world, that supplies agricultural, industrial and the primary source of drinking water for the population, in which it supplies 56.8 billion m³ of freshwater every year. Egypt is facing a real water crisis, this is due to the expanding population, misuse of water resources, inefficient irrigation and other human activities. The UN report suggested that by 2025 Egypt will run out of water and here we are at 2019 and the problem is real

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and needs to be solved. In Fact, this is not Egypt's problem alone, but it further extends to reach our continent and the whole world.

6. Were there any other projects you would have wanted to do, but were unable to do for any reason? Please explain.

Yes, we thought about working on several different projects in different tracks. There were many different reasons. Some products or lab supplies weren't available in our university. Also the lack of expertise in our country. We also thought mainly about solving problems that our country is facing and on how to be innovative with the least products we have.